FISCAL YEAR 2020 SECTION 205(j)(2)/604(b) WORKPLAN Date of workplan: 7/29/2019
REGION 4 Florida WATER QUALITY MANAGEMENT PLANNING PROGRAM

EPA Technical Point of Contact: Caroline Ejimofor	Phone #: 404-562-9309	Email address:	ejimofor.caroline@epa.gov
EPA Project Officer: Tina Lamar	Phone #: 404-562-9323	Email address:	lamar.tina@epa.gov
State Point of Contact: Julie Espy	Phone #: 850-245-8416	Email address:	Julie.espy@floridadep.gov
State Point of Contact: Jessica Madden	Phone #: 850-245-8342	Email address:	Jessica.s.madden@floridadep.gov

The tasks identified in this workplan address the following goal(s) and objective(s):

Goal 1 – **Core Mission:** Deliver real results to provide Americans with clean air, land, and water.

Objective 1.2 – **Provide for Clean and Safe Water:** Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.

Goal 2: Protecting America's Waters. Protect and restore our waters to ensure that drinking water is safe, and that aquatic ecosystems sustain fish, plants and wildlife, and economic, recreational, and subsistence activities.

Objective 2.2: Protect and Restore Watersheds and Aquatic Ecosystems. Protect the quality of rivers, lakes, streams, and wetlands on a watershed basis, and protect urban, coastal, and ocean waters.

Task 1: Water quality monitoring is fundamental to management state water resources. Several programs throughout the State serve to monitor these resources. Water monitoring in Florida is organized at different scales, ranging from the general to the specific. This approach is commonly referred to as tiered monitoring. FDEP's Integrated Water Resource Monitoring Strategy (IWRMS) uses three tiers for carrying out its water monitoring activities. These are designed to investigate water quality conditions to characterize the "health" of these waters and to determine the location, extent, and severity of the problem in areas where water quality thresholds are not met.

Florida's Integrated Water Resources Monitoring (IWRM) Network three tiers range from very general to specific. Tier I, a probability-based approach (the Status Network), allows FDEP to assess statistically 100 percent of the waters of the state each year. An additional statewide fixed station Trend network provides complimentary water quality loading information within the basins that links to Status Network monitoring. Monitoring in Tier II, which includes generalized basin assessments and monitoring required verifying water body impairment, addresses questions about individual basins or water bodies. Tier III includes monitoring associated with FDEP's regulatory permits, intensive surveys for TMDL development, and studies designed to verify best management practices (BMPs).

EPA Technical Point of Contact: Caroline Ejimofor Phone #: 404-562-9309 Email address: ejimofor.caroline@epa.gov
EPA Project Officer: Tina Lamar Phone #: 404-562-9323 Email address: lamar.tina@epa.gov
State Point of Contact: Julie Espy Phone #: 850-245-8416 Email address: Julie.espy@floridadep.gov
State Point of Contact: Jessica Madden Phone #: 850-245-8342 Email address: Jessica.s.madden@floridadep.gov

While most of the state's monitoring has historically focused on water chemistry, FDEP has also developed bio-assessment procedures that more directly assess whether aquatic life use support is being maintained. Bio-assessment tools for streams (the Stream Condition Index), Rapid periphyton survey, Linear Vegetation survey, and lakes (the Lake Vegetation Index) are completed and being implemented in many of FDEP's monitoring programs. The results are currently used in assessments for the 303(d) program.

In addition to traditional surface water monitoring, ground water protection is integrated in FDEP's watershed monitoring and management approach. As part of this effort, the water quality of ground water contributions to surface water bodies (base flow) is now considered an equally important ground water use to ensure the support of aquatic life in surface water bodies. This is particularly important in Florida, where ground water can provide as much as 80 percent of the total flow to surface waters.

Because ground water supplies about 87 percent of Florida's drinking water, Florida has become a national leader in protecting this resource. FDEP established a ground water quality monitoring network in 1984, under the authority and direction of the 1983 Water Quality Assurance Act. Data from over

2,900 monitoring wells and 1,300 private water supply wells all the state's main aquifer systems are collected and stored in a database.

Task 2: Lab analytical support is necessary for ambient surface water quality monitoring. The laboratory's current equipment are at full capacity and cannot meet ongoing demands. The lab has prioritized replacement of these listed equipment: 1) A Seal Sample Handler: The DEP Laboratory currently analyses around 2,000 total Kjeldahl nitrogen and total phosphorous samples per month and most of these samples are for projects linked to ambient surface water quality monitoring. The sample handler will automate some part of the preparation procedures for these analyses, which will improve efficiency of the preparation and potentially also accuracy of the final analytical results. 2) A Seal, AA3 Autoanalyzer: The DEP Laboratory analyses aqueous samples for ambient surface water quality monitoring purposes for orthophosphate following EPA approved protocols. This AA3 autoanalyzer would replace aging equipment as the instrument currently in use is modular and is between 10 and 18 years old. 3)A Elemental Scientific prepFAST autosampler: The DEP Laboratory analyses aqueous samples for ambient surface water quality monitoring purposes for metals following EPA approved protocols. This autosampler has capabilities that our current one does not, such as automated dilutions. It is also designed to save time for sample uptake and probe wash. Therefore, efficiency of metals analyses will be increased with the use of this new technology. 4) AGC MSMS: The DEP Laboratory currently analyses aqueous, soil, and sediment samples for a wide range of pesticides. Many of these analyses are performed for projects linked to ambient surface water quality monitoring. This instrument will replace two over ten-year-old pieces of

EPA Technical Point of Contact: Caroline Ejimofor Phone #: 404-562-9309 Email address: ejimofor.caroline@epa.gov
EPA Project Officer: Tina Lamar Phone #: 404-562-9323 Email address: lamar.tina@epa.gov
State Point of Contact: Julie Espy Phone #: 850-245-8416 Email address: Julie.espy@floridadep.gov
State Point of Contact: Jessica Madden Phone #: 850-245-8342 Email address: Jessica.s.madden@floridadep.gov

equipment that use older technology. It is expected that increases in efficiency and accuracy of results and potentially lower detection limits would be achieved through this equipment upgrade.

Clean Water Act 205(j)(2)/604(b) Workplan Introduction and Elements *(insert a detailed description):*

Task No.	Objective(s): Milestones	Commitments Outputs/Outcomes	State Annual Report	State Comments/Concerns	EPA Annual Report Comments
1- Integrated Water Resource Monitoring (Tier 1	Implement Trend monitoring network in order to determine whether trends in water quality are increasing, decreasing, or staying the same.	Tier 1 Trend Network operates on a known number of samples per year. There are 78 surface water Trend network stations. Surface water stations are sampled monthly for a total of 936 samples per year. Quality assurance samples are collected at a rate of 20%; an additional 187 samples are collected			.

EPA Technical Point of Contact: Caroline Ejimofor Phone #: 404-562-9309 Email address: ejimofor.caroline@epa.gov
EPA Project Officer: Tina Lamar Phone #: 404-562-9323 Email address: lamar.tina@epa.gov
State Point of Contact: Julie Espy Phone #: 850-245-8416 Email address: Julie.espy@floridadep.gov
State Point of Contact: Jessica Madden Phone #: 850-245-8342 Email address: Jessica.s.madden@floridadep.gov

		and analyzed for a total of 1123 samples. Data is reported on an annual basis and bi-annually in the 305(b)/303(d) Integrated Report.			
2 Lab Analytical Support	Ongoing effort to achieve and maintain water quality standards though improved monitoring of the State's water bodies.	Purchase of Instrument.			

FISCAL YEAR 2020 **SECTION 205(j)(2)/604(b) WORKPLAN** **Date of workplan: 7/29/2019**

REGION 4 **Florida** **WATER QUALITY MANAGEMENT PLANNING PROGRAM**

EPA Technical Point of Contact: Caroline Ejimofor Phone #: 404-562-9309 Email address: ejimofor.caroline@epa.gov
EPA Project Officer: Tina Lamar Phone #: 404-562-9323 Email address: lamar.tina@epa.gov
State Point of Contact: Julie Espy Phone #: 850-245-8416 Email address: Julie.espy@floridadep.gov
State Point of Contact: Jessica Madden Phone #: 850-245-8342 Email address: Jessica.s.madden@floridadep.gov

State shall allocate at least 40% of the grant amount to Regional Public Comprehensive Planning Organizations

Planning Organization - Pass-Through Entity	**Description of Project**	**Project Start Date**	**Amount Awarded**	**Environmental Results Outcomes**	**State Annual Comments/Concerns (SACC) & EPA Annual Review/Comments (EPA ARC)** *(Insert acronym with comment)* ***(As an addendum, please include programmatic narrative annual report)***
St. Johns River Water Management District	Perform monitoring for the Status and Trend monitoring Networks	10/1/2019	$216,800	Estimate water quality conditions of both surface and ground waters and determine whether trends in water quality are increasing, decreasing, or staying the same in northeast Florida.	